**1- Declining death rate & more declining birth rate, Seen in :**

a- Late expanding
b- Early expanding
c- High stationary
d- Declining

**2- In the demographic study of population, a country with low birth rate**
**and low death rate is in following phase:** نفس السؤال الأول بس بصيغة مختلفة
a- First
b- Second
c- Third
d- Fourth

**3- Population count is taken on :**
a- 1st of August
b- 1st of July
c- 1st of March
d- 1st of January

**4- What is the denominator in GFR (General Fertility Rate):**
a- Married women
b- Women in reproductive age group (15-49)
c- Married women in the age group of 15-49
d- All women

**5- Total Fertility Rate refers to:**
a- No. of women between 15 -44 yrs
b- No. of births per thousand woman
c- No. of children per woman
d- No of children in population

**6- Randomization in Experimental studies ensures that:**
1. Selection occurs by chance
2. Treatment and control groups are alike in all respect
3. Bias in observation is eliminated
4. Placebo effects are eliminated

**1- The most suitable epidemiological study design to find the association between parental consanguinity and hereditary diseases is:**
a. Case report.
b. Cohort study.
c. Correlation study.
d. Case-control study.

**2-In developing countries which of the following is considered a great population problem:**
a. Old Dependency Ratio
b. Young Dependency Ratio
c. High median age
d. Long life expectancy

**3-The two-by-two table shown below summarizes the relationship between exposure to a risk factor among cases and controls.**
The Value of Odds Ratio (OR) equals:
a. 0.03
b. 0.3
c. 3.0
d. 1.3

**4-The study using data from entire population to compare between lung cancer deaths in relation to per capita cigarette consumption is:**
a. Case report
b. Cohort study
c. Correlation studies
d. Cross-sectional studies

**5-In case control studies, an appropriate ratio of _control to cases_ is:**
a) 1:1
b) 1:2
c) 1:3
d) 1:4

**6- The method of concealing knowledge of treatment assignment in clinical trials is:**
a. <mark>Blinding</mark>
b. Validity
c. Randomization
d. Ethical issues

**7- If : Estimated midyear population = 2000**
**Number of live births = 200**
**Number of deaths= 50**
**Deaths due to pneumonia= 15**
**Calculate:**
**I. Cause-specific mortality Rate?**
**II. Rate of natural increase?**
**III. Proportional mortality?**
**Answer:**
I. Cause-specific mortality= 15/2000 X100,000=750
II. RNI= ( 200-50) / 2000 X 100 = 8%
III. Proportional mortality = 15/ 50 X 100= 30%

**New Zealand, a developed country, has 23% of its population less than 15, and 12% over 65. This makes 65% between 15 and 64.**
**Young Dependency ratio is:**
<mark>a- 35.4</mark>
b- 18.5
c- 53.8
d- 16.9

**Old dependency ratio is:**
a- 35.4
<mark>b- 18.5</mark>
c-53.8
d- 16.9

**total dependency ratio:**
a- 35.4
b-18.5
<mark>c-53.8</mark>
d-16.9

**In 1986, the incidence rate of tuberculosis infection in India was 53% and the prevalence rate was 106 %,**
**In 1971, the IR decreased to 51%, we expect the Prevalence to be:**
a- 108%
b- 106%
c- 102%
d- Non of the above

**Population Change and Public Health Exercise 2A**

**1. Median age for Uganda is 17.5 years. This implies (check all correct ones)**
A. 50% of Uganda population is less than 17.5 years of age
B. 50% of the Uganda population is of age 17.5
C. 50% of the population is above 17.5 years of age
D. Uganda's population is an 'old population'
E. 50% of Uganda's population lives only for 17.5 years

**2. The child-dependency ratio in country A is 20 and elderly-dependency ratio is**
15. Based on this information, the country seems to
A. A high fertility rate
B. A developed country with low fertility
C. A developing country with high fertility and low mortality
D. A developed country with low mortality and high fertility
E. A developing country with high mortality

**3. The total population of South Africa in 1999 was 42.6 million. The population**
for under 15 and over 65 was 34% and 5 % respectively. The child, elderly
and total dependency ratios respectively for South Africa in 1999 are
A. 50, 10, 40
B. 56, 8, 64a
C. 40, 10, 50
D. 30, 20, 60

**4. Total number of births in a hypothetical country A is 250 in year X. Number of**
female births in the same year is 120. The sex ratio for country A at birth is
A. 108
B. 92
C. 102
D. 110

**5. Young Population' implies**
A. Majority of the population die young
B. Large proportion of the population is in young age groups
C. Has low dependency ratios
D. Has a higher median age

**6. Which of following is not true for population pyramids**
A. Each horizontal bar of the pyramid represents the proportion of male and female in a particular age group out of total population
B. Each horizontal bar of the pyramid represents the proportion of male of the total male population and proportion of female of the total female population in a particular age group
C. Both absolute numbers or proportions can be used to plot the female and male population
D. Pyramids can be used to study the effect of wars etc. on the population

**7. The population of a county was 120 million when it achieved replacement fertility. The proportion of 0-30 years old was 40%. The population increased to 150 million, before ultimately achieving zero population growth at time t.The population in the 0-30 year age group at time t in the ultimate stable population will be**
A. 60 million
B. 48 million
C. 40 million
D. 70 million

**8. A child dependency ratio of more than 100 and an elderly dependency ratio of** less than 10 signifies that the population is
A. A very young population with high fertility
B. A very old population with high fertility
C. A very young population with high mortality
D. A very old population with high mortality

**9. An age dependency ratio of 120 mean that there are**
A. 120 children under 15 year for every 100 person over 65
B. 120 young adults in the age group 15-64 for every 100 person over age 65
C. 120 elderly persons over age 65 in the age group for every 100 persons in the age group 15 to 64 years
D. 120 children under age 15 and elderly person over age 65 for every 100 persons in the age group 15-64 years in the population

**10. The median age for the population in South Africa is 22 years and that of Uganda is 17.5 years, which implies that**
A. South Africa's population is younger than that of Uganda.
B. South Africa's has high mortality rate than that of Uganda
C. South Africa's has lower fertility than that of Uganda
D. South Africa has higher fertility than that of Uganda

<mark>Lecture 2a</mark>: 1(A &C), 2(D), 3(B), 4(A), 5(B), 6(B), 7(B), 8(A), 9(D), 10(C)

**Population Change and Public Health Exercise 2B**

**1. Population aging is mainly due to**
A. Fertility decline
B. Mortality decline with increase in life expectancy
C. Immigration of older migrants from other countries
D. Fertility increase

**2. Population aging is**
A. Increase in proportion of older people in the total population
B. Increase in the average life of individuals in the population
C. Increase in the proportion of dependant population
D. Increase in dependency ratio

**3. Differences in the age dependency ratios between developing and developed countries are mainly due to**
A. Difference in proportion of over 65 population
B. Differences in proportion of under 15 population
C. Differences in the proportion of working population
D. There are no significant differences between the two.

**4. A population pyramid with a broad base and a narrowing top is characteristic of**
A. Slowing growing population
B. Population with zero growth rate
C. A rapidly growing population
D. Population with a negative growth rate

**5. Mortality decline in developing countries which is most often due to decline in infant mortality rates will lead to**
A. Aging of the population
B. Younging of the population
C. No effect on the age structure of the population
D. Decrease in life expectancy of the individuals

**6. The population growth during demographic transition depends upon of all the following except:**
A. The time taken to complete the transition
B. The crude rate of natural increase during stage of peak growth (stage 2) of demographic transition
C. The absolute population size
D. The pre-transition fertility rates

**7. The tendency of the population to continue to grow after reaching**

**replacement fertility is due to (check all that apply)**
A. Larger cohorts entering into reproductive years due to past high fertility
Decline in mortality at the older ages
B. The population does not grow once its achieves replacement level fertility
Increase in marriage rates

**8. Which of the following is true of population momentum?**
A. Population growth is evenly distributed by age
B. The older the age group, higher the growth rate
C. The proportion of 0-30 years increases significantly
D. The proportion of older population will increase first followed by increase in younger population

**9. Demographic bonus refers to**
A. Decrease in age dependency ratio during fertility decline
B. Decline in overall population size with fertility decline
C. Decline in elderly population with fertility decline
D. Decline in under 15 population with fertility decline

**10. During fertility decline,**
A. The age dependency ratio will increase initially and then decline
B. The age dependency ratio will remain the same
C. The age dependency ratio will decline to a minimum and then will start rising again
D. The age dependency ratio will continue declining

<mark>**Lecture 2b:**</mark> 1(A), 2(A), 3(B), 4(C), 5(B), 6(C), 7(A&B), 8(B), 9(A), 10(C)

1.  **An observational design that measures existing disease and current exposure level at a single point in time is:**
a.  Cross –sectional study.
b.  Cohort study.
c.  Case-control.
d.  Case report.

2.  **Attrition may occur in:**
a.  Case- control study.
b.  Clinical trials.
c.  Correlation study.
d.  Cross- sectional.

3.  **The most suitable epidemiological study design to find the association between parental consanguinity and hereditary diseases is:**
a.  Cross –sectional study.
b.  Cohort study.
c.  Case-control.
d.  Case report.

4.  **The study using data from entire population to compare between lung cancer deaths in relation to per capita cigarette consumption is:**
a.  Correlation study.
b.  Cohort study.
c.  Case-control.
d.  Case report.

5.  **in cohort studies, we can measure the association between the risk factor and the exposure by:**
a.  Odd ratio.
b.  Incidence rate.
c.  Relative risk
d.  Prevalence rate.

6.  **The only absolutely essential criterion for causal relation is:**
a.  Biological plausibility.
b.  Causality.
c.  Temporality.
d.  Biological gradient.

7.  **A person or animal without apparent disease who harbors a specific infectious agent and is capable of transmitting the agent to others is:**
a.  Reservoir.
b.  Carrier.

c. Host.
d. ….

**8. The prevalence rate can be calculated from:**
a. Cross- sectional studies.
b. Cohort studies
c. Correlation studies.
d. Case-control studies.

**9. The presence of a new effective vaccine can lead to:**
a. Increase  incidence .
b. Decrease  prevalence.
c. Increase  prevalence.
d. Decrease incidence.

**10. Name one zoonotic disease and its reservoir:**

Disease: …………………….                    Reservoir: ……………………

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| a | b | c | a | c | c | b | a | d |

10) Brucellosis / cows and pigs.